

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A noise filter comprising:

a ground line for discharging to ground a short-circuit current having an angular frequency of at least ωn radians per second and generated on an electronic apparatus having a capacitance to ground of C farads;

an inductor having an inductance of L henrys, ~~which suppresses for suppressing a~~ noise current, induced on the ground line, flowing from the ground line into the electronic apparatus; and

a resistor having a resistance of R ohms and connected in parallel with the inductor;
wherein:

~~assuming a lower limit angular frequency of the noise current to be ωn [rad],
inductance of the inductor to be L[H], resistance of the resistor to be R[Ω], and earth
capacitance of the electronic apparatus is C[F], a relationship of $\sqrt{L/C} < R < 2 \omega n^2 L$, and
(provided $C > 1/(4 \omega n^4 L)$) is established~~

$$\underline{C > 1/(4 \omega n^4 L)}.$$

2-4. (Canceled)

5. (Currently amended) The noise filter as claimed in claim-2 1, wherein ~~assuming an angular frequency of a power supply current to be ωp [rad]~~ has a frequency of ωp radians per second, a lower limit angular frequency of the noise current to be ωn [rad], inductance of the

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~~inductor to be $L[H]$, and resistance of the resistor to be $R[\Omega]$, a relationship of and $10(\omega_p \cdot L)$
 $< R < (\omega_n \cdot L)/10$, is established.~~

6. (Currently amended) The noise filter as claimed in claim-2 1, wherein ~~assuming an~~
~~angular frequency of a power supply current to be $\omega_p[\text{rad}]$ has a frequency of ω_p radians per~~
~~second~~, ~~a lower limit angular frequency of the noise current to be $\omega_n[\text{rad}]$, inductance of the~~
~~inductor to be $L[H]$, and resistance of the resistor to be $R[\Omega]$, a relationship of and $100(\omega_p \cdot L)$~~
 ~~$< R < (\omega_n \cdot L)/100$, is established.~~

7. (Currently amended) The noise filter as claimed in claim-2 1, wherein ~~assuming an~~
~~angular frequency of a power supply current to be $\omega_p[\text{rad}]$ has a frequency of ω_p radians per~~
~~second~~, ~~a lower limit angular frequency of the noise current to be $\omega_n[\text{rad}]$, inductance of the~~
~~inductor to be $L[H]$, and resistance of the resistor to be $R[\Omega]$, a relationship of and~~
 ~~$1000(\omega_p \cdot L) < R < (\omega_n \cdot L)/1000$, is established.~~

8. (Canceled)

9. (Currently Amended) The noise filter as claimed in claim-2 1, wherein the noise
filter has an impedance of 0.1 ohm or less when the short-circuit current is 25[A], ~~impedance~~
~~of the noise filter is $0.1[\Omega]$ or less~~ 25 amperes.

10. (Currently amended) The noise filter as claimed in claim-2 1, wherein the reactance of the inductor is 2000 ohms or more when a-the frequency of the noise current is 10[kHz], reactance of the inductor is 2[k Ω] or more 10 kilohertz.

11. (Currently amended) The noise filter as claimed in claim-2 1, wherein the resistor comprises a variable resistor.

12. (Currently amended) The noise filter as claimed in claim 11, further comprising a frame, wherein:

the inductor comprises a toroidal coil,

~~a parallel circuit including of the toroidal coil and the variable resistor is~~ comprise a parallel circuit housed in ~~a-the~~ the frame, with the variable resistor ~~is~~ arranged in a space surrounded by an inner peripheral wall of the toroidal coil, and

the variable resistor includes a resistance varying means-member for varying the resistance of the variable resistor, ~~is-the resistance varying member being~~ provided at such a position as to be able to be operated from ~~an~~ outside of the frame.

13. (Previously presented) An electronic apparatus comprising the noise filter as claimed in claim 1.

14-16. (Canceled)

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17. (Previously presented) An electronic apparatus comprising the noise filter as claimed in claim 5.

18. (Previously presented) An electronic apparatus comprising the noise filter as claimed in claim 6.

19. (Previously presented) An electronic apparatus comprising the noise filter as claimed in claim 7.

20. (Canceled)

21. (New) An electronic apparatus comprising the noise filter as claimed in claim 9.

22. (New) An electronic apparatus comprising the noise filter as claimed in claim 10.

23. (New) An electronic apparatus comprising the noise filter as claimed in claim 11.

24. (New) An electronic apparatus comprising the noise filter as claimed in claim 12.

25. (New) An electronic apparatus comprising the noise filter as claimed in claim 13.

26. (New) A noise filter comprising:

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means for discharging to ground a short-circuit current having an angular frequency of at least ωn radians per second and generated on an electronic apparatus having a capacitance to ground of C farads;

means having an inductance of L henrys, for suppressing a noise current, induced on the ground line, flowing from the ground line into the electronic apparatus; and

means having a resistance of R ohms and connected in parallel with the inductance means, wherein:

$$\sqrt{L/C} < R < 2 \omega n^2 L, \text{ and}$$

$$C > 1/(4 \omega n^4 L).$$